L1 ANSWER 1 OF 1 WPIX (C) 2002 THOMSON DERWENT
AN 1995-345777 [45] WPIX
DNC C1995-151912
TI Carbon black, esp. furnace black useful for pigmenting paint, ink or resin - is prepd. by oxidising carbon black with ozone to increase blackness.
DC A60 E36 G01 G02 H08
IN OKUYAMA, K; SUZUKI, M
PA (MITU) MITSUBISHI CHEM CORP
CYC 4
PI **DE 19511240** A1 19951005 (199545)* 8p <--
JP 07258578 A 19951009 (199549) 5p
DE 19549544 A1 19980212 (199812)
TW 326466 A 19980211 (199836)
US 6136286 A 20001024 (200055)
ADT DE 19511240 A1 DE 1995-19511240 19950327; JP 07258578 A JP 1994-57258 19940328; DE 19549544 A1 Div ex DE 1995-19511240 19950327, DE 1995-19549544 19950327; TW 326466 A TW 1995-102723 19950321; US 6136286 A Cont of US 1995-410532 19950327, US 1997-824182 19970326
FDT DE 19549544 A1 Div ex DE 19511240
PRAI JP 1994-57258 19940328
AN 1995-345777 [45] WPIX
AB DE 19511240 A UPAB: 19951114
C black (I) has a ratio of a max. absorption in the 1800-1670 cm-1 region to a max. absorption in the 1670-1500 cm-1 range of not less than 0.65, taking a straight line joining the absorptions at 1805 cm-1 and 900 cm-1 in the absorption diagram of the IR absorption spectrum as base line.

Also claimed is furnace black (IA), in which the said ratio is not less than 0.5.

(I) and (IA) are obtd. by oxidn. of C black or furnace black with O3.

The said ratio is pref. 0.65-2.0 for (I) and (IA).

In an example, 10 g. furnace black with a particle size of 13 nm. and BET specific surface area of 360 m2/g. were treated for 100 hrs. in 0.6 1/min. gas contg. 0.2 g/hr. O3. The prod. had a max. absorption ratio of 0.78, cf. 0.25 for the starting material. The Hunter lightness (L value), determined in paint, was 3.87, cf. 5.19 for the starting material.

USE - (I) and (IA) are useful as pigments in paints, inks, resins, etc..

ADVANTAGE - (I) and (IA) are blacker than the usual C blacks of the same particle dia. and specific surface area and as black as those with a larger particle dia. and smaller surface area.

Dwg.1/4